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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,475	01/18/2002	Stefan Keller-Tuberg	Alcatel 135881	1452

24587 7590 12/01/2006

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EXAMINER

MEUCCI, MICHAEL D

ART UNIT PAPER NUMBER

2142

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,475

Applicant(s)

KELLER-TUBERG, STEFAN

Examiner

Michael D. Meucci

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-26,28,30-41,43 and 45-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-26,28,30-41,43 and 45-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

1. This application has been reassigned to Michael Meucci.
2. This action is in response to the request for reconsideration filed 15 May 2006.
3. Claims 16-26, 28, 30-41, 43, and 45-55 remain pending.
4. Claims 1-15, 27, 29, 42 and 44 are cancelled.

Response to Amendment

5. Examiner acknowledges amendments made to overcome objections to all claims under 37 CFR 1.73(d)(1). These objections have been withdrawn.
6. Examiner acknowledges amendments made overcome rejections to claims 26-28, 30-41, 43, and 45-55 under 35 U.S.C. 112, second paragraph. These rejections have been withdrawn.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 26, 28, 30-31, 38-41, 43, 45-46, and 41-45, 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Putzolu et al., (U.S. 6,359,902], in view of Handley, M., et al., Session Announcement Protocol, RFC- 2974, IETF, pp. 1-12, October 2000, hereinafter referred to as Handley.

a. Regarding claim 26, Putzolu teaches a system comprising: A multicast-capable distribution network (Figs. 6 and 12); A centralized server coupled to the multicast-capable distribution network (Fig. 6 elem. 110 - data source); A plurality of end use[r] download devices coupled to the multicast-capable distribution network (Fig. 12 elems. 116a-e); A data processor program (Fig. 6 software running on multicast transmission gating system - elem. 102); The data processor program being capable of enabling the multicast-capable distribution network to facilitate: Transmitting control service information for reception by the plurality of end user devices (col. 6 43-46; col. 7 62-64; col. 5 lines 12-17); Receiving a plurality of requests for reception of offered content designated in said control service information, wherein said requests are received from a group of end user download devices (col. 9 15-24);

Putzolu does not explicitly teach: Multicasting control service information for reception by the plurality of end user devices; Receiving control service information initially transmitted from a centralized control apparatus; Generating replicated versions of said control service information, wherein said replicated versions are generated by the multicast-capable distribution network; Multicasting said replicated versions of said control service information for reception by each one of the group of said end user download devices; Wherein the group of end user download devices and the multicast-capable distribution network are cooperable for using information learned from the service control information for connecting the group of end user download devices to the offered content without the group of end user download devices communicating to the centralized server. However, Handley teaches a session announcement protocol for

multicasting session description information to a network (p. 1). Handley teaches that a SAP announcer (i.e., a source of a multicast transmission) periodically sends an announcement to a multicast address (p. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Putzolu to have the data source announce the audio/video multicast using a SAP multicast message and have the multicast gating system use SAP to receive multicast SAP message from data source and then to subsequently retransmit those messages to the end user devices using a SAP multicast message. This modification would have been obvious because using SAP would allow the system to conform with standard Internet multicast protocols, thus allowing the multicast gating system to be used with a broader range of clients and data sources. It also would have been obvious that this functionality would have to be incorporated into Putzolu's multicast transmission gating system because of Putzolu's teaching that the multicast transmission gating system is the access point for all multicast communications (col. 5 lines 13-17). In the resulting system, Putzolu's multicast transmission gating system would receive SAP multicast announcements from the data source and multicast those messages to the end user devices/clients over the private network. The multicast transmission gating system would therefore receive control service information initially transmitted from a centralized control apparatus (data source announcement of audio/video session being multicast - Putzolu col. 6 lines 62-63). The multicast transmission gating system would generate a replicated version of said control service information, wherein said replicated versions are generated by the multicast capable network (multicast transmission gating

system generates its own revised announcement for the private network). The multicast transmission gating system would multicast said replicated versions of said control service information for reception by each one of the group of said end user download devices (multicast transmission gating system multicasts its own SAP message to the clients on the private network). The multicast transmission gating system would configure the multicast-capable distribution network to route said control service information by downstream apparatuses within the multi- cast capable network in response to receiving said control service information (multicast transmission gating system configures the nodes 128 to multicast the SAP messages to the clients). The combination of Putzolu in view of Handley therefore teaches the invention as claimed.

b. Regarding claim 28, the combination of Putzolu in view of Handley teaches a system wherein enabling the multicast-capable distribution network to facilitate receiving said control service information from the centralized control apparatus includes enabling the multicast-capable distribution network to facilitate receiving an unsolicited advertisement of said control service information from the centralized control apparatus (data source sends SAP announcement to multicast transmission gating system).

c. Regarding claim 30, the combination of Putzolu in view of Handley teaches a system wherein the multicast-capable distribution network is statically configured for routing said control service information along pre-defined paths within the multi[-]cast capable distribution network (Putzolu col. 4 lines 28-53).

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d. Regarding claim 31, the combination of Putzolu in view of Handley teaches a system wherein the multicast-capable distribution network is configured for dynamically enabling access to said control service information by downstream apparatuses within the multi[-]cast capable network (Putzolu col. 7 line 62 to col. 8 line 8).

e. Regarding claim 38, the combination of Putzolu in view of Handley teaches a system wherein the multicast-capable distribution network is an IP based distribution network (Putzolu col. 4 lines 15-27) and enabling the multicast-capable distribution network to facilitate receiving the plurality of request for reception includes enabling the multicast-capable distribution network to facilitate receiving an IGMP membership report from each one of the group of said end user download devices (Putzolu col. 9 lines 15- 35).

f. Regarding claim 39, the combination of Putzolu in view of Handley teaches a system wherein the data processor program is further capable of enabling the multicast- capable distribution network to facilitate receiving said control service information from a centralized control apparatus in response to receiving the IGMP membership report from each one of the group of said end user download devices (Putzolu col. 9 lines 15- 35).

g. Regarding claim 40, the combination of Putzolu in view of Handley teaches a system wherein enabling the multicast-capable distribution network to facilitate multicasting said offered content includes enabling the multicast-capable distribution network to facilitate (a) receiving an initially transmitted copy of said offered

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content from a centralized control apparatus (Putzolu col. 6 lines 62-63; col. 7 lines 15-17); generating replicated versions of said offered content, wherein said replicated versions are generated by the multicast-capable distribution network (Putzolu col. 9 lines 36-49); forwarding said replicated versions of said offered content for reception by each one of the group of said end user download devices (Putzolu col. 9 lines 36-49).

h. Regarding claims 41, 43, 45-46, and 41-45, they are data processor program product claims corresponding to system claims 26, 28, 30-31 and 38-40. They are rejected for the same reasons.

i. As to claims 53-55, they are computer program product claims corresponding to apparatus claims 38-40 and are rejected for the same reasons.

9. Claims 16-25, 32-37 and 47-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Putzolu and Handley as applied above, in view of Gonzalez (U.S. 6,725,278) and Zigmond, (U.S. 6,330,719).

a. Regarding claim 32, the combination of Putzolu in view of Handley teaches the invention substantially as claimed. See the rejection of claim 26 above. The combination of Putzolu in view of Handley does not explicitly teach enabling the multicast-capable distribution network to facilitate synchronization of the group of said end user download devices for enabling reception of said requests by the multicast-capable distribution network within the prescribed interval of time. Gonzalez on the other hand teaches the use of the network time protocol to synchronize the clocks of systems on a network (col. 1). It would have been obvious to one of ordinary skill in the

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art at the time the invention was made to combine Gonzalez's teaching regarding the use of NTP to synchronize clocks by having Putzolu's various systems (e.g., the data source, multicast transmission gating system, and the clients) run NTP so the systems agree on the current time. This combination would have been obvious because of Gonzalez's teaching that accurate time is desirable (col. 1 lines 13-24). The combination of combination of Putzolu in view of Handley and Gonzalez does not teach a system that facilitates receiving said requests within a prescribed interval of time. Zigmond on the other hand teaches a system in which requests to a server are deferred over an interval in order to reduce the load on a server (col. 7 lines 18-35 - "when" teaching start time and "expires" teaching end time). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Zigmond's teaching regarding the distribution of requests to a server over an interval with the system of the combination of Putzolu in view of Handley and Gonzalez by having IGMP join messages sent over an interval. This combination would have been obvious because it would distribute the load of join messages on the combinations multicast-capable distribution network thus reducing the processing load at the systems processing the join requests.

b. Regarding claims 33-37, the reasons for rejection for these claims should be readily apparent from the discussion of claim 32.

c. Regarding claims 47-52, they are data processor program product claims corresponding to system claims 32-37. They are rejected for the same reasons.

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d. Regarding claim 16, it is a method broader in scope than system claim 26. Since the system of claim 32 performs the method of claim 16, no separate reasons for rejection are needed.

e. As to dependent claims 17-25, their reasons for rejection are clear from the discussion of claims 26, 28, and 30-40 above.

Response to Arguments

10. Applicant's arguments filed 15 July 2006 have been fully considered but they are not persuasive.

11. (A) The applicant has provided no arguments regarding the previous rejection and has only amended the claims in attempt to circumvent the prior art of record. See rejections above for citations in prior art for newly claimed subject matter.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shur et al. (U.S. 7,031,326 B1) discloses unicast endpoint client to access a multicast IP session.

Schmitt et al. (U.S. 7,043,528 B2) discloses connecting video conferencing to a distributed network.

Zee et al. (U.S. 7,047,306 B2) discloses internet broadcasting.

Pearce et al. (U.S. 7,079,495 B1) discloses enabling multicast telecommunications.

Betros et al. (U.S. 7,080,120 B2) discloses collaborative processing of distributed applications.

Stern et al. (U.S. 7,113,998 B1) discloses grouping recipient of streaming data.

She et al. (U.S. 7,133,922 B1) discloses streaming data and multicasting.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANDREW CALDWELL
PRIMARY PATENT EXAMINER